

Determinants Influencing the Health Outcomes of Coal Mine Workers in Central India: A Cross Sectional Study

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Abstract

Background: Despite the health risks, coal mining remains essential for meeting much of the world's energy demands. While mining drives economic growth, it also harms the environment and workers' health. **Objectives:** The objective of this study was to study common health problems and sociodemographic factors among coal mine workers and provide appropriate recommendations. **Materials and Methods:** A cross-sectional study was carried out in an underground Coal mine in Central India. A predesigned, pretested pro forma was used to interview 250 Coal mine workers. Qualitative data were expressed by number and percentage, and quantitative data were expressed in terms of mean and standard deviation. Chi-square test was applied to observe the differences between proportions. $P < 0.05$ was taken as statistically significant. **Results:** Maximum study participants, 96 (38.4%), were in the age group of 56–60 years. Among study participants, 108 (43.2%) reported having musculoskeletal disorders. Other health problems found in this study were hypertension 95 (38%), diabetes mellitus 79 (31.6%), etc., **Conclusions:** Musculoskeletal disorders were found to be the most prevalent ailment among coal mine workers in this study. This study found that older age, longer duration of job, and type of shifts were associated with musculoskeletal disorders among coal mine workers.

Key words: Coal mine workers, health problems, morbidities, musculoskeletal disorders